UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY





RECONNAISSANCE DRILL HOLE IN THE YAMPA COAL FIELD, ROUTT COUNTY, COLORADO, 1979

Ву

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Open-File Report 79-1593

1979

This report has not been edited for conformity with U.S. Geological Survey editorial standards or stratigraphic nomenclature.

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To convert ENGLISH UNITS	Multiply by	To obtain METRIC UNITS
Feet	0.3048	Meters
Miles	1.609	Kilometers

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INTRODUCTION

As part of an ongoing drilling program, the U.S. Geological Survey drilled a hole in the vicinity of Milner, Colo., in July 1979. The hole is located in the Yampa coal field and was drilled primarily to help evaluate coal reserves on short-term coal lease application C-27962 of Energy Fuels Corp. The lease area is 14 miles southwest of Steamboat Springs in the Cow Creek 7½-minute quadrangle (fig. 1).

The hole was drilled to a depth of 270 feet before caving problems stopped drilling progress. A suite of six geophysical logs were run: natural gamma, neutron, gamma-gamma density, spontaneous potential, single-point resistance, and caliper (figs. 2, 3, and 4).

Fifty feet of Quaternary colluvium and pediment gravel were penetrated.

Underlying this is 220 feet of Upper Cretaceous Williams Fork Formation of the Mesaverde Group. In this area, the Williams Fork consists of about 1,200 feet of interbedded sand and siltstone. Only the lower nonmarine portion, approximately 400 feet thick, was encountered in this hole.

Three coal seams were penetrated in the hole. These are, in ascending order, the Wolf Creek, Wadge, and Lennox beds, and are known collectively as the middle coal group.

A second drill hole was started, but it was abandoned at a depth of 15 feet owing to the continual caving of the hole in water-bearing gravel zones.

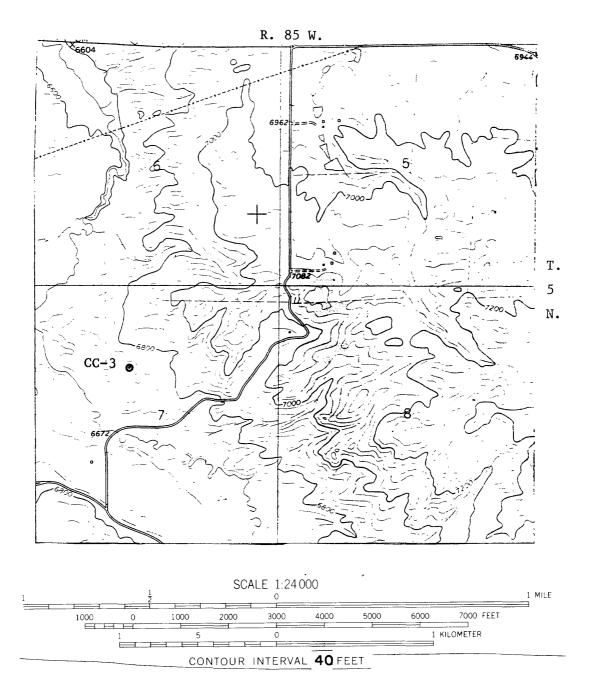


Figure 1.--Location of drill hole in the Cow Creek quadrangle, Routt County, Colorado.

LITHOLOGIC LOG FOR DRILL-HOLE CC-3

Depth in feet	Lithology		Strip log n. = 50 feet)
0 - 50	Colluvium and pediment gravels	Elevation — 6753'	CC-3	1
50 - 70	Salt-and-pepper sandstone	0.00		
70 - 71.5	Coal (Lennox seam)			
71.5-113	Fine-grained salt-and-pepper sandstone; gray flaser-bedded siltstone and carbonaceous shale (Cb Sh)			
113 -116	Coal (Wadge seam)	70'		1.5' Lennox
116 -117	Carbonaceous shale	CbSh		
117 -123	Coal (Wadge seam)			
123 -252	Fine-grained salt-andpepper sandstone; gray flaser-bedded siltstone, and carbonaceous shale	113' -		lÓ(I) Wadge
752 –255	Coal (Wolf Creek seam)	CbSh		
255 -262	Carbonaceous shale			
262 -265	Coal (Wolf Creek seam)		-	
		Cb Sh 252' — 262' —	TD 268'	2') Wolf 2') Creek